#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025159

Address: 333 Burma Road **Date Inspected:** 15-Nov-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Tian Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

FCAW welding of fillet welds located on Traveler Rails components identified as 20TR2-029 as identified on critical weld repair data sheet B-CWR-1568. Welder is identified as welder no. 069896. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G(1F)-repair-1.

FCAW welding of fillet welds located on Traveler Rails components identified as 20TR2-030 as identified on critical weld repair data sheet B-CWR-1568. Welder is identified as welder no. 215397. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G(1F)-repair-1.

Bay Number 2

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Sub Assembly component identified as West Grillage SA7512-001 weld number(s) 036 & 037. Welder is identified as welder no. 066734.

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The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2333-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Sub Assembly component identified as West Grillage SA7512-001 weld number(s) 050 & 051. Welder is identified as welder no. 066443. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Sub Assembly component identified as West Grillage SA7512-001 weld number(s) 064 & 065. Welder is identified as welder no. 066421. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

Bay Number 3

This inspector did not observe any welding or contract work being performed in this bay today.

Bay 4

This inspector observed ZPMC quality control personnel performing ultrasonic testing of the following listed OBG components identified as sub assembly components: SA3336B-001, SA337A-001, SA3336-001, SA3336-002, & SA336-003 each for weld number 001.

Bay 6

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no.(s) 07356. The member(s) is/are identified as OBG Barrier Rails. The weld designations reviewed are as follows:

- 1. W2-SB10-026-081.
- 2. W2-SB10-027-081.
- 3. W2-SB10-028-019.
- 4. W2-SB10-030-050.
- 5. W2-SB9-046-081.
- 6. W2-SB9-050-019.
- 7. W2-SB9-051-050.
- 8. W2-SB9-052-019.
- 9. W2-SB9-053-050.
- 10. W2-SB9-055-081.
- 11. W2-SB9-057-050.
- 12. W2-SB9-058-019.
- 13. W2-SB9-064-019.
- 14. W2-SB9-065-081.

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This QA inspector assisted in the performance MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel, by the lot method testing procedure. This QA Inspector assisted in the generation an MT report for this date by inspector lot no. All components were as listed on NWIT notification no. 07356. The member(s) is/are identified as OBG Barrier Rails component. The weld designations reviewed are as follows:

- 1. W2-SB10-026-001~179.
- 2. W2-SB10-027-001~179.
- 3. W2-SB10-028-001~179.
- 4. W2-SB10-030-001~179.
- 5. W2-SB9-046-001~179.
- 6. W2-SB9-050-001~179.
- 7. W2-SB9-051-001~179.
- 8. W2-SB9-052-001~179.
- 9. W2-SB9-053-001~179.
- 10. W2-SB9-055-001~179.
- 11. W2-SB9-057-001~179.
- 12. W2-SB9-058-001~179.
- 13. W2-SB9-064-001~179.
- 14. W2-SB9-065-001~179.

Performed verification VT for the component(s) and corresponding welds for component on OBG Barrier Rails components listed as W2-SB10-026-001~179, W2-SB10-027, W2-SB10-028, W2-SB10-030, W2-SB9-046, W2-SB9-050, W2-SB9-051, W2-SB9-052, W2-SB9-053, W2-SB9-055, W2-SB9-057, W2-SB9-058, W2-SB9-064, & W2-SB9-065 for welds identified as welds 001~179. This QA inspector signed green tag #15073.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

### **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer